FIG. 1

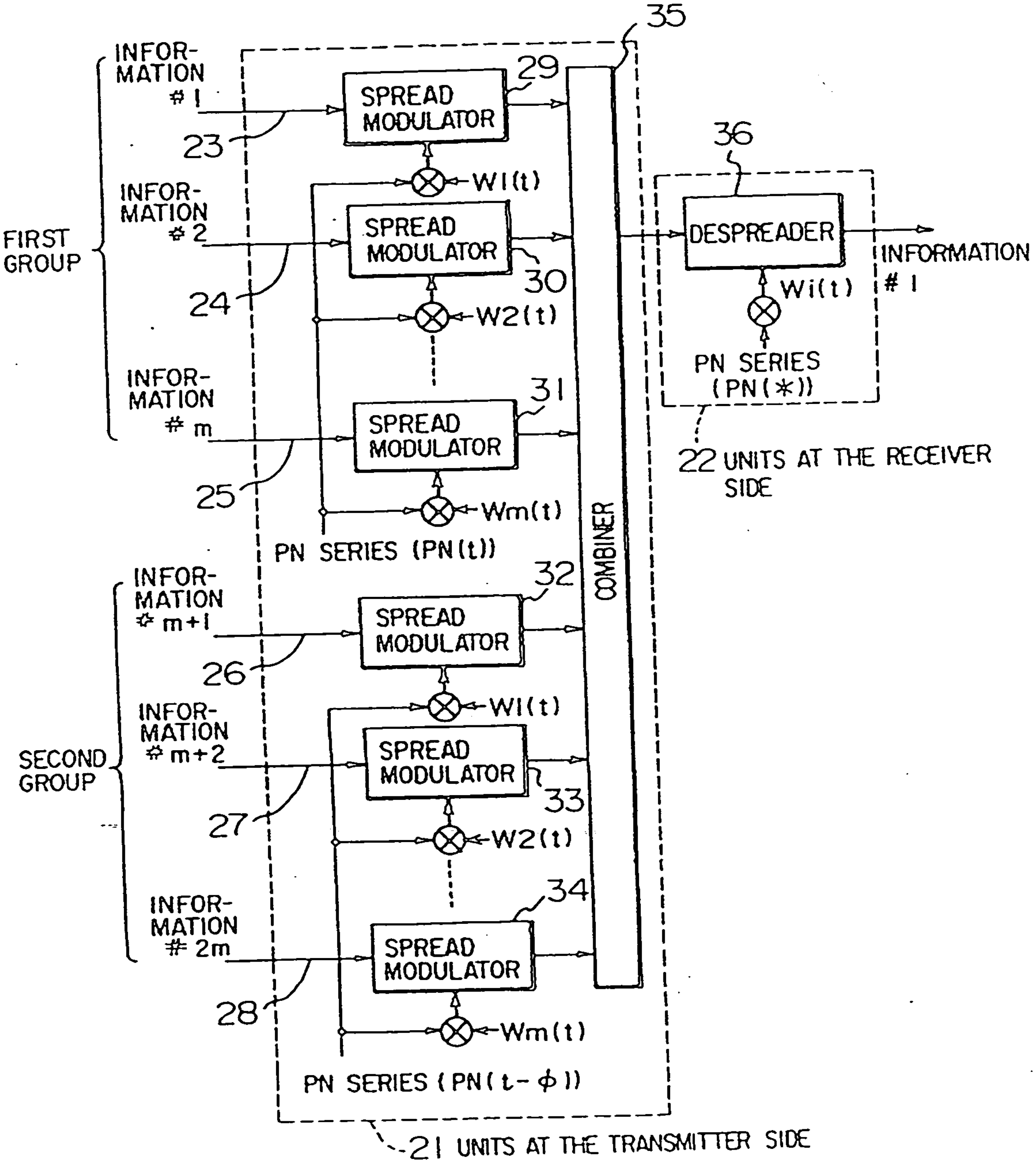
35
INFORMATION #1
29
SPREAD MODULATOR
23
W1(t)
INFORMATION #2
SPREAD MODULATOR
FIRST GROUP
24
30
W2(t)
INFORMATION #m
31
SPREAD MODULATOR
25
Wm(t)
PN SERIES (PN(t))
INFORMATION #m+1
32
SPREAD MODULATOR
26
W1(t)
INFORMATION #m+2
SPREAD MODULATOR
SECOND GROUP
27
33
W2(t)
INFORMATION #2m
34
SPREAD MODULATOR
28
Wm(t)
PN SERIES (PN(t−φ))
COMBINER
36
DESPREADER
INFORMATION #1
Wi(t)
PN SERIES (PN(*))
22 UNITS AT THE RECEIVER SIDE
21 UNITS AT THE TRANSMITTER SIDE

FIG. 2

CHANNEL NUMBER	ORTHOGONAL SPREAD CODE	⊗	PN SERIES → SPREAD CODE	
# 1	W1(t)	⊗	PN(t)	FIRST GROUP
# 2	W2(t)	⊗	PN(t)	
⋮		⋯		
# m	Wm(t)	⊗	PN(t)	
#(m+1)	W1(t)	⊗	PN(t−φ)	SECOND GROUP
#(m+2)	W2(t)	⊗	PN(t−φ)	
⋮		⋯		
#(2m)	Wm(t)	⊗	PN(t−φ)	

FIG. 3 PRIOR ART

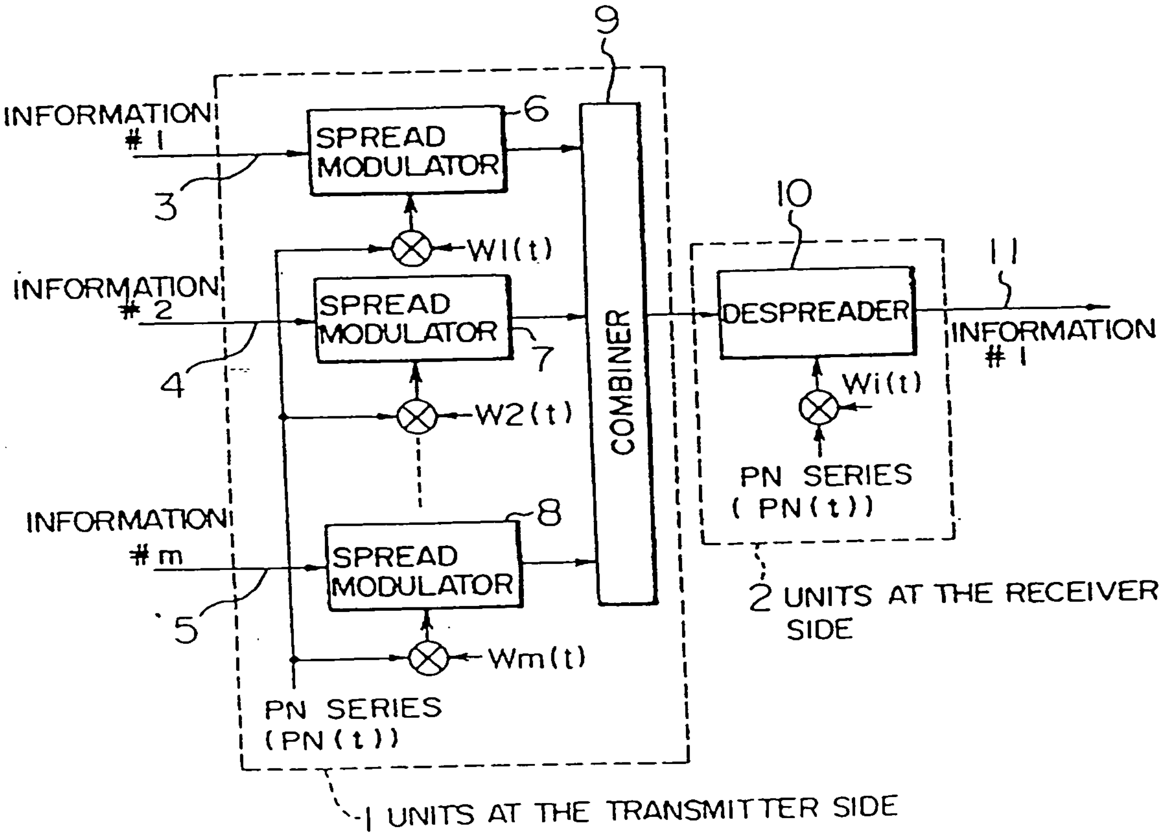

FIG. 4

PRIOR ART

CHANNEL NUMBER	ORTHOGONAL SPREAD CODE ⊗ PN SERIES → SPREAD CODE
#1	W1(t) ⊗ PN(t)
#2	W2(t) ⊗ PN(t)
⋮	· · · ·
#m	Wm(t) ⊗ PN(t)

FIG. 5

PRIOR ART

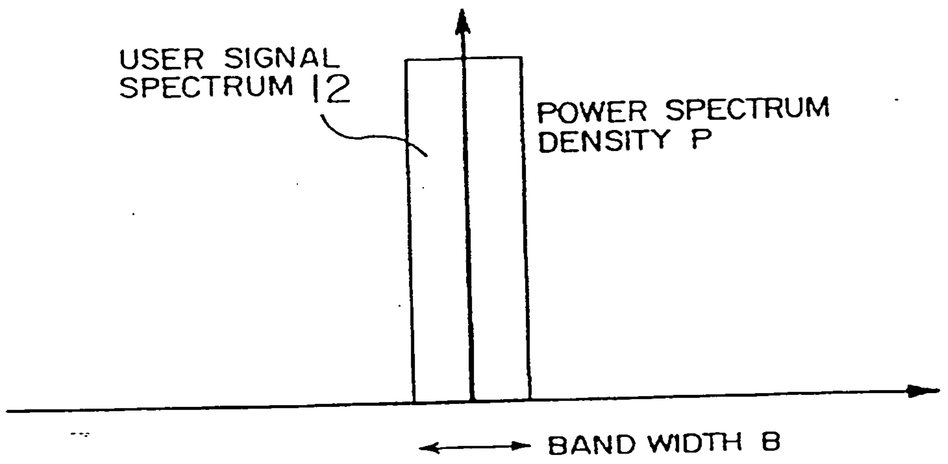

FIG. 6

PRIOR ART

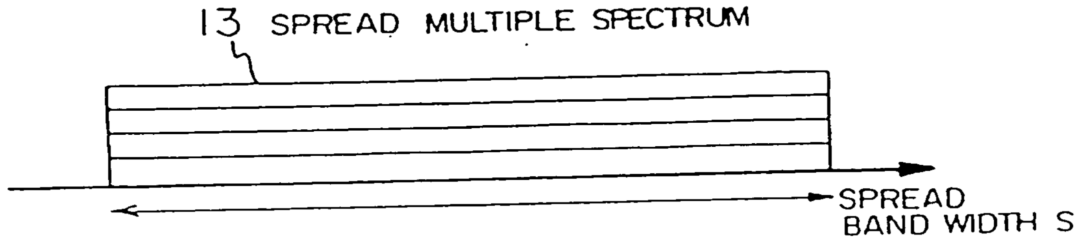

FIG. 7
PRIOR ART

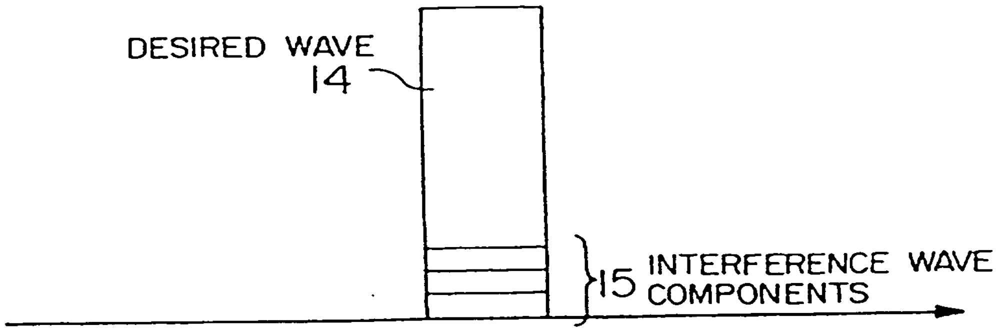

FIG. 8

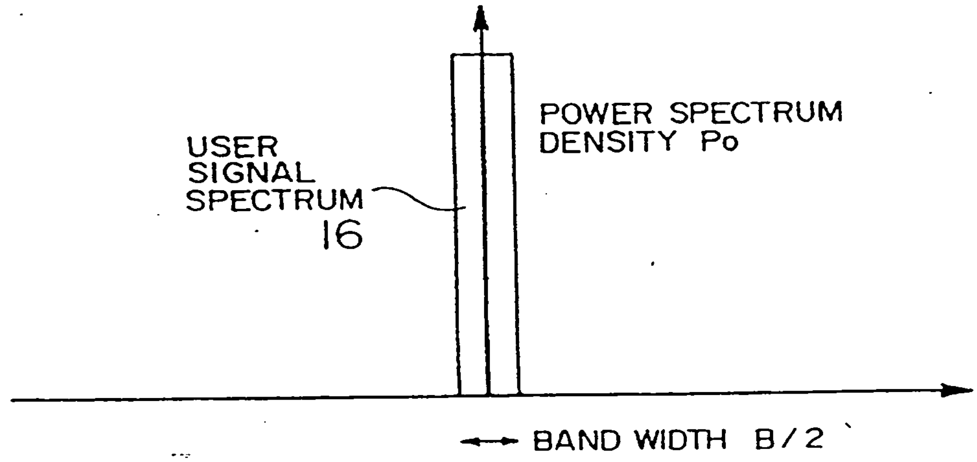

FIG. 9

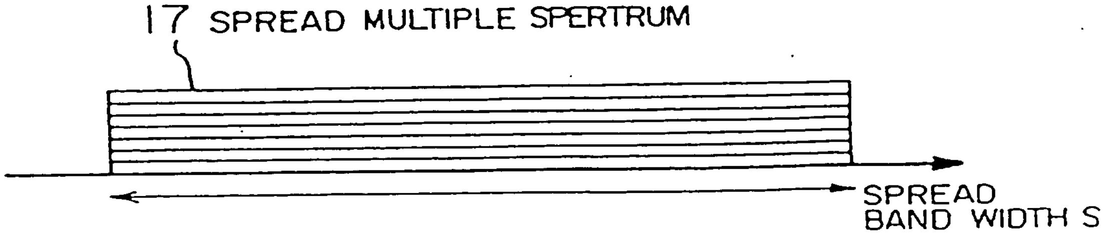

FIG. 10